

ETSO Workshop 2022 - Industry session -

20th – 21st September 2022

**EASA Direktion
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Your safety is our mission.

IAW ETSO Project - from Application to Authorization

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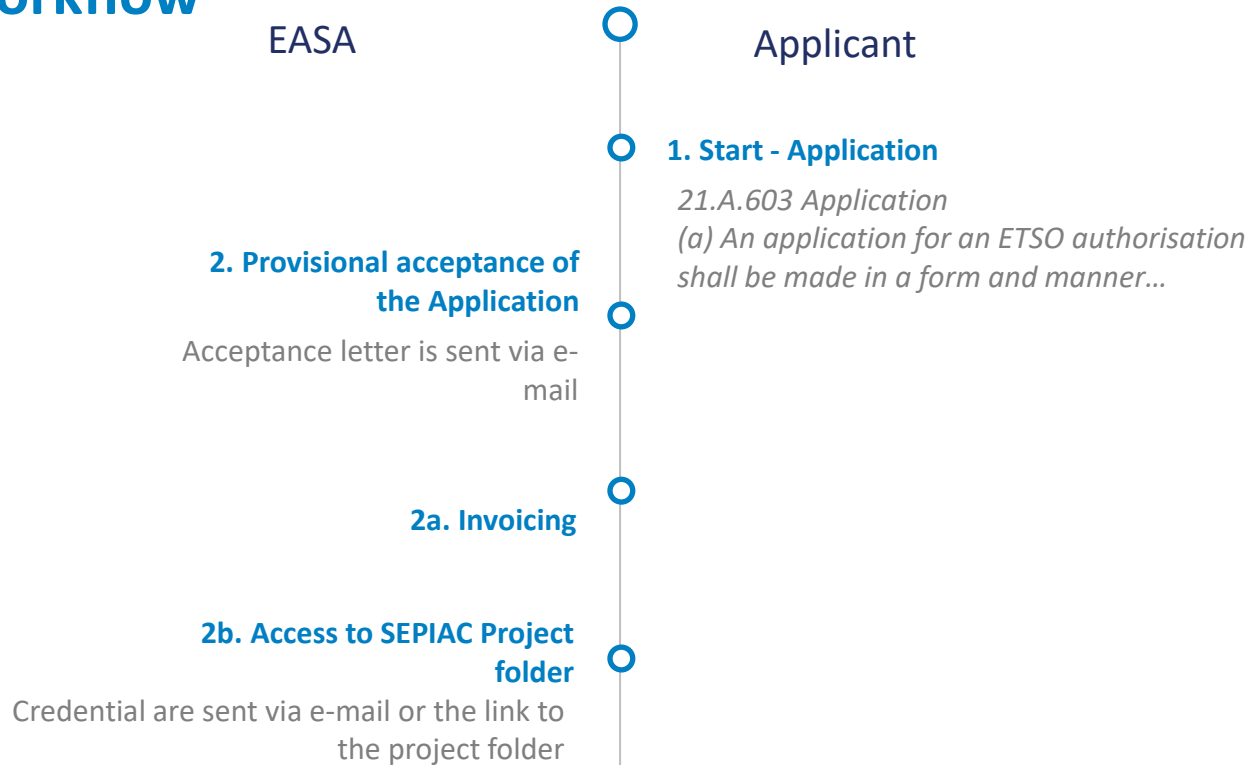
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Senior PCM ETSO

IAW ETSO Projects - from Application to Authorization

- Outline main steps/milestones in an ETSO Project Work flow
 - Inputs from the Applicant/Outputs for EASA and related legal basis
 - EASA Dpt./Actors dealing with the inputs received
 - Relevant Software/Tools supporting the workflow
 - General „heads-up“ based on lesson learned

ETSO Project Workflow



IAW ETSO Projects - from Application to Authorization

→ Workflow in an ETSO Project

→ 1. Application - Applicant

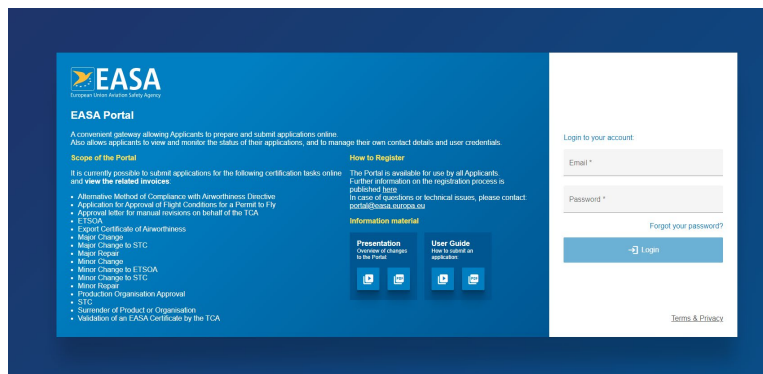
→ Tool – Applicant Portal <https://portal.easa.europa.eu/login>

→ Access to the portal following the instruction on the webpage

→ Extend the access to others within the Applicant organization

→ “Head-up”: applicant portal is not a “document exchange” portal

→ Form 34 is still available for application as back-up



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→ Workflow in an ETSO Project

→ 2. Provisional acceptance - EASA Applicant Services

→ Letter of Provisional acceptance – Automatically filled

→ Summary of the application information

→ Name and contact of the EASA ETSO PCM

→ Project number

→ 2a. Invoice – EASA Applicant Services

→ According to Fees and charge regulation [Commission Implementing Regulation \(EU\) 2019/2153 of 16 December 2019](#)

→ IAW projects are „flat fee“ based on sales price category

→ <https://www.easa.europa.eu/the-agency/faqs/fees-charges-faq>

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→ Workflow in an ETSO Project

→ 2b. Access to SEPIAC Project folder - EASA ETSO section

- Project folder will be created and access to the Applicant's reference person will be given
- Single platform for sharing project related document, comments through the "discussion" feature and unique EASA document repository
- History of document revisions
- "Head-up": large files (videos, photos, etc.) filebox would be still preferred for file exchange, coordinate with PCM

3. Task Allocation to PCM - EASA Internal step

According to internal
procedures, eligibility check and
“PCM list”

4. Certification Programme Submission

*21.A.605(a) 1.
Data requirements*

5. Lol Determination - EASA ETSO PCM

*21.B.100 (b) Level of involvement
AMC No 2 to 21.B.100(b) Level of
involvement (Lol) in European
technical standard order
authorisation (ETSOA) projects*

Deviation Request

21.A.610 Approval for deviation
During the work flow a
Deviation could be raised at any
instance

IAW ETSO Projects - from Application to Authorization

→ Workflow in an ETSO Project

→ 4. Certification Programme – Applicant

→ 21.A.605 Data requirements

(a) The applicant shall submit to the Agency the following documents:

1. a certification programme for the ETSO authorisation, setting out the means to demonstrate compliance with point 21.A.606(b);

→ AMC 21.A.605(a)(1) Certification programme

→ Certification Programme Template recommended by EASA available on EASA website:
[Template for Certification Programme ETSO](#)

IAW ETSO Projects - from Application to Authorization

→ Workflow in an ETSO Project

→ 5. Lol Determination – EASA ETSO PCM

→ 21.B.100 Level of involvement

→ (b) *For the approval of a minor repair design, minor change or ETSO authorisation other than for APU, the Agency shall determine its involvement*

→ (c) Lol shall be communicated to the Applicant by the ETSO PCM

→ AMC No 2 to 21.B.100(b) Level of involvement (Lol) in European technical standard order authorisation (ETSOA) projects

→ PCM defines Lol based on CP, Technical Familiarization meeting and other plans.

→ Typically Lol is “High reduced” for ETSO project

Mechanics

6. Documents submission

21.A.605 Data requirements

6a. Submission of Test plans

For compliance via MoC=4

7. EASA agreement on the Test Plans

PCM reviews and comments for agreement on the test plans with the Applicant

8. Witnessing of Test

*21.A.615 Inspection by the Agency
For Avionics, PCM visit the applicant to perform test witnessing*

Avionics

EASA

Applicant

7a. EASA agreement on the SW&AEH plan (SOI1)

PCM reviews and comments for agreement on the SW&AEH plans with the Applicant

7b. EASA agreement on the Environmental plan and procedures

PCM reviews, comments and feedback agreement on the Environmental Qualification plan

8. Audit on SW&AEH - EASA ETSO PCM & Panel 10 experts

*21.A.615 Inspection by the Agency
For Avionics, PCM visit the applicant to perform SOI2 and SOI3*

6. Documents submission

21.A.605 Data requirements

6a. Submission of SW&AEH plans

CS-ETSO subpart A

6b. Submission of Environmental Qualification plan and procedures

21.A.605 Data requirements

IAW ETSO Projects - from Application to Authorization

→ Workflow in an ETSO Project

→ Project work – Applicant and EASA ETSO PCM

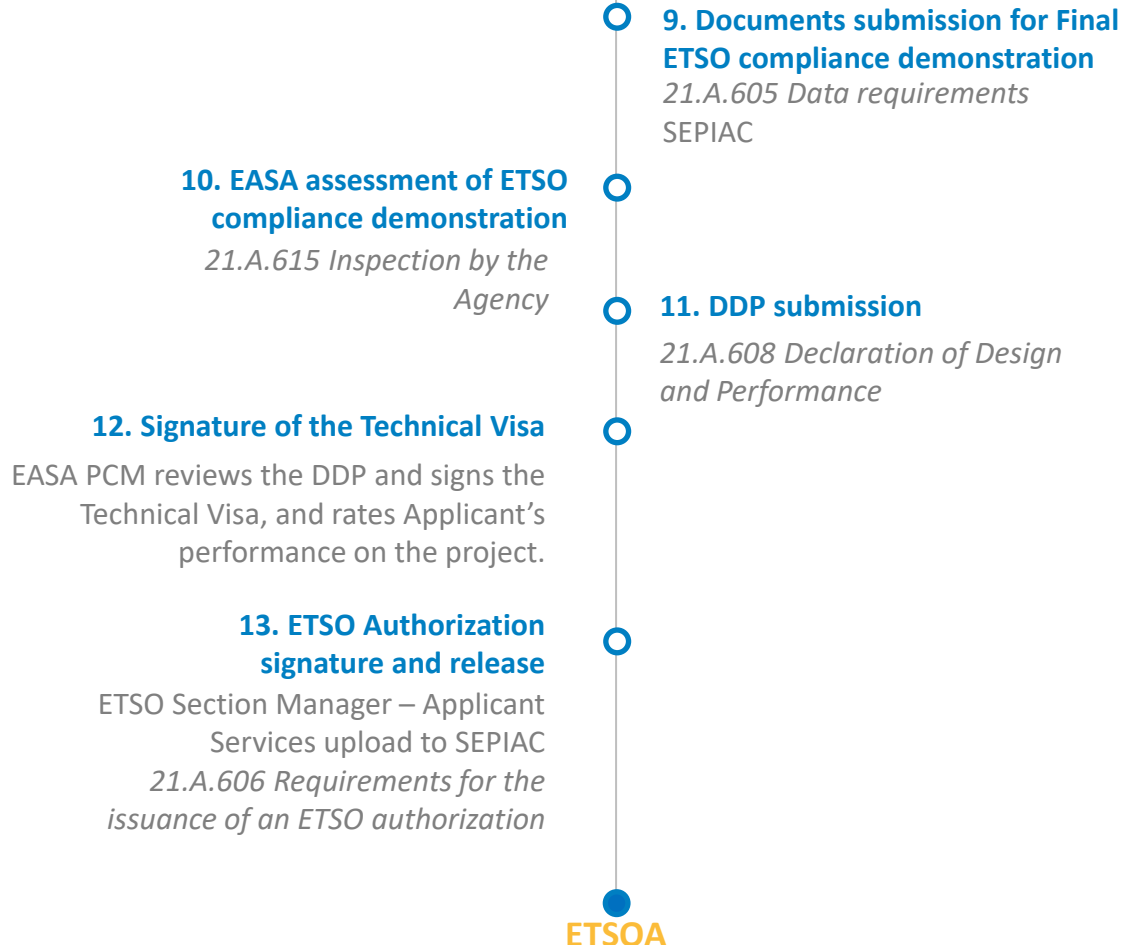
→ 6. Document submission in SEPIAC

→ 7. EASA reviews, and comments for final acceptance in SEPIAC. Applicant answers and update the plans.

→ 8. Witnessing and Audit

→ PCM visits the applicant (or suppliers) and performs SW&AEH SOI2 & SOI3 audits (for Avionics)

→ PCM performs Test witnessing



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→ Workflow in an ETSO Project

- 9. Submission of final reports/documents – Applicant
- 10. EASA ETSO PCM Review of final verification reports and ETSO compliance
 - EASA PCM Avionics performs sampling within Environmental test reports and verification reports
 - EASA PCM assesses all deliverables required per Part 21 (e.g. Marking, article drawing, Maintenance Manual, etc...)
- 11. Submission of the DDP - Applicant
 - 21.A.608 Declaration of Design and Performance (DDP) and related AMC
 - Recommended template: <https://www.easa.europa.eu/downloads/120813/en>

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→ Workflow in an ETSO Project

→ 12. Finalization of the task – EASA ETSO PCM

- EASA ETSO PCM reviews the DDP and comments where necessary.
- EASA ETSO PCM fills and signs the Technical Visa, capturing all information as necessary for the certificate
 - P/Ns, Deviations, Limitations, Remarks, Non-ETSO functions, etc.
- EASA ETSO PCM rates Applicant's performance on the project, for Lol purpose on next project
 - Adequacy of procedures
 - Errors in the compliance demonstration and re-occurring
 - Completeness of Data

IAW ETSO Projects - from Application to Authorization

→ Workflow in an ETSO Project

→ 13. Authorization signature and release – EASA ETSO Section manager & EASA Applicant services

→ After signature, ETSO Authorization (ETSOA) is uploaded by procedure to SEPIAC

→ Head-up: please check the project folder once PCM finalized the task



IAW ETSO Projects - General Heads-up

- *21.A.605 Data requirements*
- *(b) The applicant shall report to the Agency any difficulty or event encountered during the approval process that may significantly impact the ETSO authorisation.*
- For a conduction of an ETSO project, APDOA procedures shall be mature to support the project
- *21.A.602B Demonstration of capability* - (a) POA. EASA would expect that POA procedures are mature to support the manufacturing of test articles at time of collection of compliance data
 - E.g. for avionics, same board manufacturing for test articles, same for Mechanics
- Acceptance of the procedure/plans prior than entering into the test campaign reduces the risk of re-test upon EASA review of test data. Please release sufficiently in advance
- Use of “easa.filebox” shall be limited and coordinated with the ETSO PCM since SEPIAC is the official data repository
 - Indicate in SEPIAC files that are overloaded by newer ones – specific field
 - Enter the type of document – avoid upload of documents with just configuration reference.

IAW ETSO Projects - General Heads-up

- At any time during the workflow in an ETSO Project a deviation could appear
 - Deviation Request – Applicant/EASA PCM
 - Need to be referenced within Certification Programme
 - 21.A.610 Approval for deviation
 - *(a) Each manufacturer who requests approval to deviate from any performance standard of an ETSO shall demonstrate that the standards from which a deviation is requested are compensated for by factors or design features providing an equivalent level of safety.*
 - *(b) The request for approval to deviate, together with all pertinent data, shall be submitted to the Agency.*
 - “Head-up” on point “(b)”, EASA would expect a sound technical rationale (Equivalent Level of Safety), supporting the deviation request

IAW ETSO Projects - General Heads-up

- Deviation Request – Applicant, cont.
 - EASA internal consultation for at least one week
 - Three weeks public consultation on the EASA website
 - Consulted ETSO Deviations here: [Product Certification Consultations | EASA \(europa.eu\)](#)
 - Upon consultation Deviations are either Accepted or Rejected

The screenshot displays the EASA Product Certification Consultations interface. At the top, there is a search bar with a magnifying glass icon and the text 'Search'. To the right of the search bar are two date filters: 'Start date' and 'End date', each with a calendar icon. Further right is a 'Consultation type' dropdown menu with 'x ETSO' selected. Below these filters are two dropdown menus for 'Status' and 'Comments', both with downward arrows. To the right of these dropdowns are two buttons: 'Apply' (blue) and 'Reset' (grey). Below the filters, it says 'Displaying 132 items'. A list of results is shown below, with the first item dated '14 Jun 2022'. The title of the first item is 'Deviation Request ETSO-C142b#5 for an ETSO approval for CS-ETSO applicable to Non-rechargeable lithium cells and batteries (ETSO-C142b)'. The description states: 'Deviates from RTCA DO-227A by permitting an Open Circuit Voltage (OCV) increase of 6% during one test of the environmental test sequence instead of a 2% change allowed in section 2.4.4 Test samples and test sequences for LiMnO2 cells and batteries.' At the bottom of the first item, there are two status labels: 'ACCEPTED' (green) and 'CONSULTATION CLOSED' (red). Below the status labels, it says 'Deadline for comments : 04 Apr 2022' and 'Consultation Type : ETSO'.

Questions?
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easa.europa.eu/connect



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